

22643

S/144/60/000/012/003/005
E210/E335

Rectangular Pulse Generator

indicated.

1) To analyze oscillating conditions for the generator the author uses an equivalent circuit and elementary mathematics. He obtains an expression which shows that the supply voltage is proportional to the coercive force and to the average diameter of the ferrite core. Oscillating conditions improve with higher transistor alpha.

2) Oscillation frequency and current consumption depend on input voltage and circuit parameters. An expression is derived from which the following conclusions are drawn: for high supply voltages, frequency is practically independent of transistor voltage over a wide range. To reduce current consumption it is necessary to increase the number of turns of collector and feedback windings and to keep their size as small as possible. Also, supply voltage may be reduced inside the limits set by oscillation conditions.

3) Experimental results. Practical indications are given as to the circuits used, the type of transistors and the type of ferrite cores. A three-phase generator is described in detail.

Card 2/4

22643

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It is used in computers. This generator can be used as a three-phase delay line or as a trigger circuit.

4) Conclusions. a) A transistorized ferrite-core pulse generator can be used as a DC-to-rectangular pulse generator in telemetry applications; b) the relation between pulse-frequency and DC voltage is linear over a wide range. Its slope depends on collector resistance. Oscillating frequency is inversely proportional to the number of turns of collector and base windings; c) the generator described embodies the same qualities as Rohrer multivibrator and offers the following additional advantages; it requires no bias supply; it enables DC-to-multiphase pulse conversion; it enables easy pulse synchronization; it permits controlling the signal-to-pause ratio and triggered operation; d) oscillation frequency being determined by the inversion time or magnetization, the rise time of transient voltage cannot exceed half a period in the case of a variation of supply voltage. The rise time corresponds to the new value of DC voltage at the generator input. X

Card 3/4

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There are 8 figures and 3 Soviet references.

ASSOCIATION: Kafedra avtomatiki i telemekhaniki Taganrogskego
radiotekhnicheskogo instituta
(Department of Automatics and Telemechanics of
Taganrog Radio-engineering Institute) X

SUBMITTED: May 18, 1960

Card 4/4

BESSARABOV, G.V.

Networks and elements of a frequency telemetering system with digital representation. Izv. vys. ucheb. zav.; neft' i gaz 4 no.2:101-105 '61. (MIRA 15:5)

1. Taganrogskiy radiotekhnicheskiy institut.
(Petroleum industry--Equipment and supplies)
(Remote control)

BESSARABOV Gennadiy Vasil'yevich, starshiy prepodavatel'; VASIL'YEV,
Vladimir Ivanovich, assistant

Analysis of a ferrite-transistor single-stroke distributor.
Izv. vys. ucheb. zav.; elektromekh. 6 no.11:1229-1234 '63.
(MIRA 17:4)

1. Kafedra avtomatiki i telemekhaniki Taganrogskego radiotekhnicheskogo instituta.

L 45724-65 EWT(1)/EWA(h) Feb GS

ACCESSION NR: AT5011624

UR/0000/64/000/000/0491/0495

AUTHOR: Bessarabov, G.V.

TITLE: Single-stroke distributor without delay elements within coupling loops

SOURCE: Vsesoyuznoye soveshchaniye po magnitnym elementam avtomatiki, telemekhaniki, izmeritel'noy i vychislitel'noy tekhniki. Lvov, 1962. Magnitnyye elementy avtomatiki, telemekhaniki, izmeritel'noy i vychislitel'noy tekhniki (Magnetic elements of automatic control, remote control, measurement and computer engineering); trudy soveshchaniya. Kiev, Naukova dumka, 1964, 491-495

TOPIC TAGS: single stroke switch, single stroke distributor, delayless coupling, ferrite triode distributor, coupling loop design

ABSTRACT: The known single-stroke ferrite-triode distributor circuits contain delaying elements (capacitors) between successive cells (Ye. M. Martynov, Beskontaktnyye pereklyuchayushchiye ustroystva, GEI, 1961; V. A. Zhokikashvili, K. G. Mityushkin, Avtomatika i telemekhanika, vol. XIX, 1958, no. 1). In spite of obvious advantages such as the utilization of a single cycling pulse source and the closed ring operation even in the case of an odd number of cells, these designs also exhibit essential weaknesses: the energy is incompletely utilized for the preparation of the next torus, the dimensions

Cord 1/4

L 45724-65

ACCESSION NR: AT5011624

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are quite large because of the size of the capacitance, and the shape of the pulses of the collector cell current is not satisfactory. The present paper analyzes the scheme shown in Fig. 1 of the Enclosure, which is free of the above-mentioned drawbacks. It represents a single-stroke shift register made of ferrite-triode cells with coupling loops using the two-stroke principle. Because of the series connection of the cycling windings the distributor can operate in the single-stroke mode only if either a) the ampere-turns of the coupling winding exceed the demagnetization action of the field produced by the cycling current by an amount equal to $(H_m \lambda) / 0.4\pi$ for otherwise equal remagnetization time of the working and preparing cores; or b) the time for the remagnetization of the working cell exceeds the duration of the cycling pulse by a magnitude larger than the remagnetization of the preparing core for otherwise equal currents in the cycling and collector loops. (Here H_m is the maximum field strength of the core magnetic field; λ is the average length of its magnetic field line.) Since the second possibility is more convenient because the register shift circuits are usually fed by blocking generators or ferrite-triode cells, and in the first case an increase of the collector current (due, e.g., to a strong positive feedback) may lead to a self-excitation of the circuit - the author proceeds to analyze the distributor operation under conditions (b) only.

Card 2/4

L 45724-65

ACCESSION NR: AT5011624

Theoretical deductions were verified by experiments on a 10-cell ring containing P13 triodes and VT-5-4 ferrites. With $w_b = 8$ base turns, $w_k = 3$ collector turns, $w_c = 15$ coupling turns, and $w_T = 5$ cycling turns (see Fig. 1 of the Enclosure), the ring produced 6 μ sec 60 mA pulses for 3 μ sec duration of the cycling pulses. By lengthening the latter to 6 μ sec, the circuit functioned intermittently in agreement with the theoretical prediction. Orig. art. has: 14 formulas and 4 figures.

ASSOCIATION: none

SUBMITTED: 29Sep84

ENCL: 01

SUB CODE: EC, IE

NO REF SOV: 004

OTHER: 000

Card 3/4

I. 45724-65

ACCESSION NR: AT5011624

ENCLOSURE: 01 0

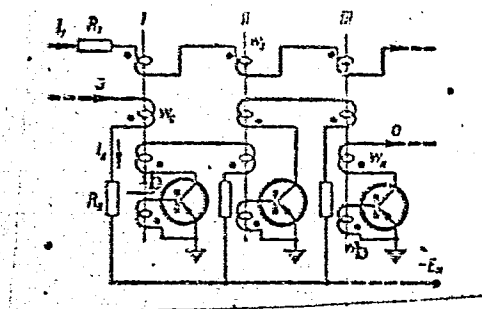


Fig. 1. Three-cell single-stroke distributor without delay elements.

Card

4/4

BESSARABOV, S.F.

BESSARABOV, S.F.

[English walnuts in Rostov Province] Gretsii orekh v Rostovskoi
oblasti. Rostov-na-Donu, Rostovskoe knizhnoe izd-vo, 1956. 34 p.
(Rostov Province--Walnut) (MLRA 10:9)

BESSARABOV, S.F.; SAVEL'YEVA, L.S.; RASTORGUYEV, L.I.; KAZAKOVA,
Ye.D., red.; OKOLELOVA, Z.P., tekhn. red.

[Fruit plants in shelterbelt plantations] Plodovye porody
v zashchitnykh nasazhdeniakh. Moskva, Sel'khozizdat, 1963.
102 p. (MIRA 17:1)
(Fruit trees) (Windbreaks, shelterbelts, etc.)
(Berries)

SHAPOSHNIKOV, Aleksey Platonovich; BESSARABOV, Sergey Filippovich;
KUZNETSOV, Konstantin Arkhipovich; ALEKSEYEVA, R.L., red.;
SHNEYDERMAN, K.A., red.; SHVIDCHENKO, L.I., red.;
BOROVINSKAYA, L.M., tekhn. red.

[Shelterbelt afforestation and landscaping in the Don Valley;
from farm practices in Rostov Province] Zashchitnoe lesoraz-
vedenie i ozelenenie na Donu; iz opyta khoziaistv Rostovskoi
oblasti. Rostov-na-Donu, Rostovskoe knizhnoe izd-vo, 1962.
269 p. (MIRA 15:10)
(Rostov Province—Windbreaks, shelterbelts, etc.)

BESSARABOV, V.

Give more attention to mail-order business. Sov. torg. 34 no.10:14-
18 0 '60. (MIRA 13:10)

1. Direktor Posyltorga Ministerstva trgovli RSFSR.
(Mail-order business)

BESSARABOV, V.A., kand.sel'skokhozyaystvennykh nauk

Breeding systems. Ptitssevodstvo 9 no.10:33-35 0 '59.
(MIRA 13:2)
(Poultry breeding)

VESELOV, Ye.A., prof.; VSYAKIKH, A.S., prof.; DENISOV, N.I., prof.;
GERCHIKOV, N.P., prof.; LASTOCHKIN, S.N., prof.; ALIKAYEV,
V.A., dots.; BESSARABOV, V.A., dots.; KALININ, V.I., dots.;
SOKOLOV, A.K., dots.; ZAVARSKIY, A.I., red.; DEYEVA, V.M.,
tekhn. red.

[Animal husbandry and veterinary hygiene] Zhivotnovodstvo i
zoogigiena. [By] E.A.Veselov i dr. Izd.2., perer. i dop.
Moskva, Sel'khozizdat, 1963. 451 p. (MIRA 17:2)

BESSARABOV, V. I.

Bessarabov, V. I. -- "Certain Questions of the Irrigation of Sugar Beets Left to Seed under the Conditions of the Central Chernozem Oblasts." Moscow Order of Lenin Agricultural Acad imeni K. A. Timiryazev, Moscow, 1955 (Dissertation for the Degree of Candidate of Agricultural Sciences)

SO: Knizhnaya Letopis', No. 24, Moscow, Jun55, pp 91-104

BESSARABOV, V.I.

New methods of mechanical harvesting of sugar beets. Sakh. prom. 31
no. 4:67-69 Ap '57. (MLRA 10:6)

1. Vsesoyuznyy institut mekhanizatsii.
(Sugar beets--Harvesting)

KOREN'KOV, V.A.; BESSARABOV, V.I.

Continuous method for harvesting sugar beets and their storage
and preparation. Sakh.prom. 33 no.7:60-64 J1 '59.
(MIRA 12:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mekhanizatsii
sel'skogo khozyaystva (VIM).
(Khmel'nitskiy Province--Sugar beets)

MOROZ, S.M., BESSARABOV, V.I.

Processing sugar beets harvested by the continuous method. Sakh.
prom. 34 no.7:23-25 J1 '60. (MIRA 13:7)

1. Makovskiy sakharney zavod (for Moroz).
2. Vsesoyuznyy nauchno-issledovatel'skiy institut mekhanizatsii
sel'skogo khozyaystva (for Bessarabov).
(Sugar beets)

KOREN'KOV, V.A.; BESSARABOV, V.I.

Continuous harvesting of sugar beets in the Kuban. Sakh. prom.
35 no.8:56-59 Ag '61. (MIRA 14:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mekhanizatsii
sel'skogo khozyaystva.

(Kuban--Sugar beets--Harvesting)

KOREN'KOV, V.A.; BESSARABOV, V.I., kand.sel'skokhozyaystvennykh nauk

Continuous-flow techniques in harvesting sugar beets. Mekh.
i elek. sots. sel'khoz. 20 no.3:9-13 '62. (MIRA 15:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mekhanizatsii
sel'skogo khozyaystva. 2. Chlen-korrespondent Vsesoyuznoy
akademii sel'skokhozyaystvennykh nauk imeni Lenina (for Koren'kov).
(Sugar beets)

BESSALANOV, Z. F., BELYAYEV, I. M., (Candidates of Veterinary Sciences, Moscow Veterinary Academy).

"Method of Phase Contrast Microscopy in Making a Study of Formed Blood Elements."
Veterinariya vol. 33., no. 11., November 1961., p. 77

BESSARABOVA, L.M.

Nematodes of forage beans in Moscow Province. Trudy Gel'm.
lab. 16:17-20 '65.

Nematodes of peas in Moscow Province. Ibid.:21-23
(MIRA 19:2)

V-9

USSR/Pharmacology and Toxicology - Toxicology.

Abs Jour : Med. Biol., No 21, 1958, 98629

Author : Bessarabova, R.V.

Inst :

Title : Some Data on the Toxicology of Aluminum Compounds.

Orig Pub : V sb.: Vopr. gigiyeny truda, professional'noy psikhologii i toksikologii v prom-sti Sverd. obl. Sverdlovsk, 1955, 142-146.

Abstract : Aluminum compounds (in a concentration of 2-3 mg/n. depress the processes of phosphorylation and glycolysis in isolated blood of dogs. With combined action of aluminum and fluorine compounds, this depression is less pronounced. Intravenous injection of aluminum acetate to rabbits leads to the reduction of the content of total phosphorus in the tissue and blood of animals. Apparently, disturbance of phosphorylation is one of the most essential primary toxicodynamic reactions of combinations of aluminum with a tissue substratum. -- From the author's summary.

Card 1/1

BESSARABOVA, R. V.

✓ 2889. Cutting out the toxic effect of carbon disulphide in experiments. A. L. Iudovics and R. V. Bessarabova *Farmatol. i. Tekhnol.* 1935, 19, No. 3, 50-52; *Russk. Med.* 1935, Abstr. No. 79502. Absolute lethal doses of CS₂ were injected subcut. into mice, wt. approx. 20 g. (0.1 ml. CS₂ in 0.2 ml. sunflower oil). A preliminary administration (after 30 min.) of 8 ml. novocaine increased the duration of the life of the poisoned animals (from 1-3 to 5-10 hr.). In experiments on dogs, novocaine reduced the toxic effect. A particularly strong antitoxic effect was shown on dogs by administration of 100 mg/kg. of the Na salt of p-aminobenzoic acid 30 min. before administration of the CS₂. Sodium benzoate did not show such an effect. The toxic action of CS₂ on dogs also slackened off (after 15 min.) with administration of 15 mg. caffeine and 1-2 mg. NaBr. (Russian) R. McKEOWN

SOV/137-59-3-5523
Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 3, p 83 (USSR)

AUTHOR: Bessarabova, R. V.

TITLE: Investigation of the Toxic Action of Compounds of Aluminum and Beryllium by Means of Radioactive Phosphorus (Issledovaniya toksicheskogo deystviya soyedineniy alyuminiya i berilliya s pomoshch'yu radiofosfora)

PERIODICAL: V sb.: Vopr. gigiyeny truda, profpatol. i prom. toksikol. Vol 2. Sverdlovsk, 1958, pp 271-275

ABSTRACT: During poisoning of the organism with F and V compounds the metabolism is disrupted with regard to phosphorus-containing elements, which phenomenon is characterized by the decrease in the so-called "activity". The increase of the specific activity with lactate during poisoning with fluorides and with ascorbic acid during vanadate poisoning is an important factor in the medical-prophylactic action of these antidotes in combatting the poisoning. The present investigation was made on the poisoning of animals with Al and Be compounds. A sharp decrease of the total P in liver, muscle, and brain tissue was established by radiological methods. The effect of adenylic

Card 1/2

SOV/137-59-3-5523
Investigation of the Toxic Action of Compounds of Aluminum and Beryllium (cont.)
acid as an acceptor of inorganic phosphate was also investigated; adenylic acid
exhibited no antitoxic effect.

V. A.

Card 2/2

KONDRATSKAYA, Ye.A.; BORISOVA, A.N.; BESSCHASTNAYA, V.M.; ULYBIN, N.G.

Heat treatment of thin K4ONKhM alloy wire. Biul. TSIICHM no.2:
47 '61. (MIRA 14:9)

(Alloys--Heat treatment)

BESSCHASTNOV, P., podpolkovnik

Developing physical endurance in training exercises. Voen.vest.33 no.4:
35-37 Ap '54. (MIRA 12:3)
(Physical education and training, Military)

VAL'DMAN, D.N., inzh.; BESSCHASTNYI, A.S., inzh.

Mechanizing the unloading of loose materials at the Rostov
Agricultural Machining Plant. Mashinostroitel' no.2:20-21
F '60. (MIRA 13:5)
(Loading and unloading--Technological innovations)

BELEVTSSEV, G.A.; GAVRILENKO, N.G.; GRINENKO, I.M.; KOROSTIK, P.O.;
KOTEL'NIKOV, I.V.; KRASAVTSEV, N.I., kand. tekhn. nauk;
MISHCHENKO, N.M.; POPOV, N.N., kand. tekhn. nauk; SEMIK, I.P.,
kand. tekhn. nauk; TOTSKIY, G.P., kand. tekhn. nauk; SHESTOPALOV,
I.I.; Primali uchastiye: SOLDATKIN, A.I.; SOLOMKO, V.P.;
SOLOMATIN, A.M.; BOLOTSKIY, D.V.; ZAPOROZHETS, N.P.;
BESSCHASTNIY, A.Ye.; SHVETS, N.Kh.; LIKHUNIN, S.D.; SHUMSKIY, L.B.;
VAS'KOVICH, N.A.; YEROKHINA, A.I.; GELYUKH, B.A.

Desulfuration of pig iron in a fast-revolving and continuous
drum. Met. i gornorud. prom. no.4:3-5 JI-Ag '65. (MIRA 18:10)

BESSCHASTNYY, F.P.

Cooperative workers can handle any task. Avtom., telem.
i sviaz' 8 no.5:21-23 My '64. (MIRA 17:10)

1. Starshiy elektromekhanik po novym rabotam Konotopskoy
distantzii Yugo-Zapadnoy dorogi.

BESSHCHASTNYI, I. V.

Besschastnyy, I. V. — "Investigation of a Multishuttle Mechanism." Min Higher Education USSR, Moscow Textile Inst, Moscow, 1955 (Dissertation for the Degree of Candidate in Technical Sciences)

SO: Knizhnaya Letopis', No 24, 11 June 1955, Moscow, Pages 91-104

BESSCHASTNYY, I.V.

Determining the total clearance of multiple shuttle mechanisms.
Izv. vys. ucheb. zav.; tekhn. tekst. prom. no.3:96-102 '59.
(MIRA 12:11)

1. Moskovskiy tekstil'nyy institut.
(Looms)

PESSCHETNOV, P. P.

"The Growing of Oaks in Shelter Belts in the Foothill Region of the Zailiski Ala-Tau." Cand Agr Sci, Kazakh State Agricultural Inst, Alma-Ata, 1953. (RZhBiol, No 2, Sep 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (10)

So: Sum. No. 481, 5 May 55

RUBANIK, V.G.; KORNEYCHIK, Zh.N.; MEL'NIK, A.F.; SOLONINOVA, I.N.;
ZHERONKINA, T.A.; KALUGIN, E.S.; TKACHENKO, V.S.; BESSCHETNOV,
P.P.; PROTASOV, A.N.; PARAVIAN, A.V., doktor biol. nauk, otv.
red.

[List of trees and shrubs recommended for landscaping in
populated places of Kazakhstan] Spisok derev'ev i kustarni-
kov, rekomenduemykh dlia ozeleneniia naselennykh punktov Ka-
zakhstana. Alma-Ata, Izd-vo AN KazSSR, 1963. 85 p.
(MIRA 17:3)

1. Akademiya nauk Kazakhskoy SSR. Institut botaniki. 2. Glav-
noye upravleniya lesnogo khozyaystva i okhrany lesa Soveta
Ministrov Kazakhskoy SSR (for Tkachenko). 3. Kazakhskiy
sel'skokhozyaystvennyy institut (for Besschetnov, Protasov).

BEUSCHETNOV, Y.Ya., inzh.

Mineral elements from capron. Tsement 31 no.4:12 31-Ag
(MIRA 18:8)
165.

1. Scripitsinskiy tsementno-shiferney kombinat.

SUSHKOV, K.I.; BESSCHETNOVA, M.A.

Developing new varieties of roses. Biul. Glav. bot. sada
no. 38:91-94 '60. (MIRA 14:5)

1. Botanicheskiy sad AN Kazakhskoy SSR, Alma-Ata.
(Roses—Varieties)

BESSCHETNOVA, M.V.

Effect of external factors on the results of artificial
pollination of roses. Trudy Alma-At. bot. sada 7:50-59 '63.
(MIRA 16:10)

NAGY, Judit, dr.; PAPP, Gabor, dr.; BESSE, Gabriella, dr.

Arterial embolism consecutive to the injection of "retard" penicillin.
Orv.hetil. 101 no.33:1184-1186 14 Ag.'60.

1. Debreceni Orvostudományi Egyetem, Gyermekklinika.
(PENICILLIN exicel)
(EMBOLISM etiol)

VASIL'YEV, D.V.; BESSEKERSKIY, V.A.; NEYMAN, L.R.; PIVOVAROV, S.P.;
POLONSKIY, V.I.; FATEYEV, A.V.

Professor Arkadii Timofeevich Blazhkin, 1904 - ; on his 60th
birthday and the 35th anniversary of his scientific and
educational work. Elektrichestvo no.4:94 Ap '64. (MIRA 17:4)

BESSEMYANOVA, N.P.

Daily photosynthesis of some diatoms in the Black Sea. Trudy SBS
12:121-129 '59. (MIRA 14:10)
(BLACK SEA--DIATOMS) (PHOTOSYNTHESIS)

BESSENOV, M. V.

"Ultrasound Propagation in Certain Melts in a Wide Temperature Range."

paper presented at 4th All-Union Conf. on Acoustics, Moscow, 26 May - 2 Jun 56.

GARBER, Yu.N.; BOVKUN, R.A.; Primala uchastiye; BESSENOVA, Z.

Properties of azeotropic systems formed by isomeric xylenes and styrene with C_3-C_4 alcohols. Zhur.prikl.khim. 37 no.1:153-161 Ja '64.
(MIRA 17:2)

1. Altayskiy politekhnicheskiy institut, Kuznetskiy filial Vostochnogo nauchno-issledovatel'skogo uglekhimicheskogo instituta.

BESSENYAI, A. (Budapest, XI, Muegyetem rakpart 3); MOLNAR, I. (Budapest, VI, Muegyetem rakpart 3).

The reconstruction of the Polytechnical University and the scientific and technical work of its instructors after the liberation, 1945-1948. Periodica polytechn. eng. 7 no.1: 65-78 '63

1. Department of Marxism-Leninism, Polytechnical University of Budapest. Presented by Prof. Dr. T. Elek.

BESSENYEI, ZOLTAN

Csiperkegomba termelese.

Budapest, Hungary, Mezogazdasagi Kiado, 1954, 123 p.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 6, June 1959.
Uncl.

CA

11D

Application of metabolic stimulants in terpentine industry. A. A. Ilesan. Doklady Akad. Nauk S.S.S.R. 72, 1143-4 (1950).—Application of lanolin paste with heteroauxin or 1-naphthylacetic acid to the rosin collection cuts on the conifer trunks showed some yield improvement, although unfavorable weather nullified much of the application in one series. In another series, naphthylacetic acid (more effective agent) showed a 30% increase of yield when applied in concn. of 300 mg. per 1 g. of paste, and some 20% increase even at 20-50 mg. level.
G. M. Kosolapoff

SOV/136-58-12-5/22
Method/^{of}Roasting Zinc Concentrates in a Boiling Layer with
Simultaneous Distilling-off of Lead and Cadmium

participated in this work) and also with its simultaneous granulation. For preliminary granulation, sulphite-cellulose lye or bentonite was used and, after drying, roasting was effected in a 104-mm diameter, 3 000 mm high heat-resisting tube with the bed-depth maintained at a level of 1 000 mm. Gas cleaning was by a 300 x 200 x 300 mm chamber followed by a sleeve filter. Roasting was carried out in two stages: in the first with a deficiency of air and the distillation of lead and cadmium; in the second stage with excess air, the SO₂- and O₂- contents of the exit gases being 4-6 and 12-14%, respectively, the corresponding figures for the first stage being 12 and 0.2%. Various concentrates treated at the Belov Works were tested and the authors enumerate the optimal conditions and mention that a 70-tons of concentrate/day installation is now being designed by Giprotsvetmet for the works for checking the laboratory results. The 0.05 m² hearth area rectangular furnace described by I.V. Babina (Tsvetnyye Metally, 1958, Nr 7) was used for the roasting tests with partial granulation in the boiling layer. The results

Card2/3

SOV/136-58-12-5/22

Method of Roasting Zinc Concentrates in a Boiling Layer with
Simultaneous Distilling-off of Lead and Cadmium

(Table 4) showed that by increasing air flow from the 10-11 cm/sec used in practice to 17-20 cm/sec, the roasting could be effected at a higher temperature than 900-980 °C; with increasing temperature the cyclone-dust output decreased (Table 5). This method is now under test at the Belovsky Works. The author conclude that the Gintsvetmet work has proved the applicability and advantage of boiling layer roasting in pyrometallurgical zinc production. There are 1 figure and 5 tables.

ASSOCIATION: Gintsvetmet

Card 3/3

SOV/136-59-6-5/24

AUTHORS: Babina, I.V., ~~Besser, A.D.~~, Alyushin, Ye.I.,
Lukin, A.N. and Yedziyev, S.S.

TITLE: Roasting of Zinc Concentrates in an Effervescent Bed
with Simultaneous Elimination of Lead and Cadmium and
Coarsening of Cinder Granules (Obzhig tsinkovykh
kontsentratov v kipyashchem sloye s otgonkoy svintsa i
kadmiya i ukрупneniyem zeren ogarka)

PERIODICAL: Tsvetnyye metally, 1959, Nr 6, pp 27-32 (USSR)

ABSTRACT: By carrying out roasting of zinc concentrates in an
effervescent bed with simultaneous granulation of the
cinders and volatilisation of lead and cadmium, it was
found that when the speed of air supply to the furnace
was increased to 17-20 cm/sec, roasting could be carried
out at a bed temperature of 1100 - 1150°C. An
examination of the laboratory results was carried out in
the reconstructed furnace KS-3. When the furnace was
reconstructed for the first time, the hearth area was
decreased from 19.3 to 8.4 m² and it was given a
rectangular shape with a length-to-width ratio of 5.3:1.
Card 1/6 This made it possible for the mildly oxidizing zone in the

SOV/136-59-6-5/24

Roasting of Zinc Concentrates in an Effervescent Bed with
Simultaneous Elimination of Lead and Cadmium and Coarsening of
Cinder Granules

effervescent bed to be extended and thereby favourable conditions to be created for the elimination of lead and cadmium as sulphides (the vapour tension of these metals at the roasting temperature is higher than that of oxides). The decrease of the hearth area was brought about by an extra layer of fireclay brick; vertical brick walls were laid up to a height of 1.2 m and above that followed a slanting layer at an angle of 60° (Figure 1). In the reconstruction of the furnace KS-3, a means for the separation of coarse dust from volatile matter at 750 - 800°C was provided in the form of dust extractors. Experiments carried out in the thus altered furnace have confirmed the laboratory experiments and shown that at 1050 - 1150°C the roasting process goes on steadily, the material is not turned into monolite but a coarsening of the cinder granules and a decrease in dust loss is observed. The work of the lined dust extractors was, however, rendered difficult because of

Card 2/6

SOV/136-59-6-5/24

Roasting of Zinc Concentrates in an Effervescent Bed with
Simultaneous Elimination of Lead and Cadmium and Coarsening of
Cinder Granules

formation of crust of sulphided dust inside them. However, in the second reconstruction of the furnace, it was decided to see whether it was possible to catch the coarse dust in dust chambers built inside the furnace. To this end, vertical divisions were made of brick inside the furnace. A diagram of the layout of chambers in the furnace is shown in Figure 2. Investigations carried out after the second reconstruction of the furnace have shown that 80% of the dust was caught in the chambers. As a result of the unfavourable position of the gas inlet into the first chambers, the dust loss increased in this series of experiments up to 50% of the total quantity of solid roasting products. The third reconstruction of the furnace (Figure 3) was designed to reduce dust losses by increasing the volume of the furnace above the bed. The hearth area was decreased to 6.6 m² and the dust chambers inside the furnace were left out. The slanting part of the furnace was made at an angle of 75 - 80° to the horizontal. The control layout for the

Card 3/6

SOV/136-59-6-5/24

Roasting of Zinc Concentrates in an Effervescent Bed with
Simultaneous Elimination of Lead and Cadmium and Coarsening of
Cinder Granules

technological parameters of the roasting process is shown in Figure 4. A mixture consisting of zinc concentrates with an addition of Waelz oxides was roasted. The charge contained 46-48% Zn, 27-29% S, 1.1-1.4% Pb, 0.14-0.19% Cd and 10-11% moisture. This was charged into the fore-chamber of the furnace. The cinders were cooled and submitted to further treatment. Investigations were carried out at 950, 1000, 1050, 1150 and 1190°C. At a temperature of above 1000°C, the elimination of Pb and Cd from the cinders proceeded satisfactorily and the amount which was removed increased with increasing temperature of the bed. This dependence is shown in Table 2 and in Figure 5. The reduction of dust removal in relation to the temperature of the process is shown in Figure 6. As a result of their investigations, the authors have arrived at the following conclusions.

1) The method worked out for roasting zinc concentrates enables the output of the effervescent-bed furnace to be

Card 4/6

SOV/136-59-6-5/24

Roasting of Zinc Concentrates in an Effervescent Bed with
Simultaneous Elimination of Lead and Cadmium and Coarsening of
Cinder Granules

sharply increased and enables cinders to be obtained which are suitable for pyrometallurgical re-treatment in which the sintering stage is left out. The new method also enables the extraction of Pb and Cd to be sharply raised by re-treating sublimates which are enriched with these metals.

2) At a temperature of 1100 - 1190°C, the furnace works steadily; the hearth remains free of crusts.

3) In order to cut down the dust losses to a minimum, the furnace must have a considerable volume above the bed which ensures a long stay and a low speed of the gas in the working space of the furnace. The charge must be added directly to the effervescent bed.

4) In order to attain the best elimination of Pb and Cd the furnace must have a rectangular shape with a length-to-width ratio of the hearth of approximately 6:1.

Card 5/6

SOV/136-59-6-5/24
Roasting of Zinc Concentrates in an Effervescent Bed with
Simultaneous Elimination of Lead and Cadmium and Coarsening of
Cinder Granules

There are 6 figures and 2 tables.

ASSOCIATIONS: Gintsvetmet (Babina, I. V., Besser, A. D.)
Belovskiy tsinkovyy zavod (Belovo Zinc Plant) (Alyushin, Ye.I.,
Lukin, A.N., Yevsdiyev, S.S.)

Card 6/6

BABINA, I.V.; BESSER, A.D.

Roasting of zinc concentrates in a fluidized bed with a driving
off of lead and cadmium. Sbor. nauch. trud. Gintsvetmeta no.18:
328-338 '61. (MIRA 16:7)

(Zinc—Metallurgy) (Distillation)

BESSER, A.D.; BABINA, I.V.

Testing the simultaneous roasting of zinc concentrates
and limestone in a fluidized bed. Sbor. nauch. trud.
Gintsvetmeta no.23:96-105 '65. (MIRA 18:12)

BESSER, M. R., Engr.

Magnets

Rapid milling of flat surfaces by fastening the parts on magnetic plates,
Podshipnik No. 2, 1953

Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

BESSER, M. R.

USSR/ Engineering - Cutting tools

Card 1/1 : Pub. 103 - 17/23

Authors : Besser, M. R.

Title : High-speed groove-cutting tools

Periodical : Stan. i instr. 8, page 35, Aug 1954

Abstract : A new type of a groove-cutting tool is described. Diagrams depicting the above tool are presented, together with its specifications, types of steel used, and the required working speeds and feeds. Table.

Institution :

Submitted :

BESSER, M. R.

USSR/Engineering - Time study

Card : 1/1

Authors : Besser, M. R., Engineer

Title : Increasing production in boring-machine work

Periodical : Vest. Mash. 34/5, 53 - 54, May 1954

Abstract : Formulas are given, with explanations, showing how systematic adherence to prescribed speeds shortens the time for a series of operations. Table; drawings.

Institution :

Submitted :

BESSER, M. R.

A chuck designed for thread cutting. Stan. i instr. 26
no. 5:32 My '55. (MLRA 8:8)
(Chucks) (Screw cutting)

BESSER, M. R.

Multiplace attachments in serial production. Span. 1 instr. 26
no. 8:22-23 Ag'55. (MIRA 8:12)
(Milling machines)

BESSER, M.R., inzhener

Continuous cross-feed on internal grinding machines. Vest.mash.
35 no.7:37-39 JI'55. (MIRA 8:10)
(Grinding machines)

BESSER, M.R., inzhener

Increasing labor productivity in mashining rolls. Vest.mash.35
no.8:41-42 Ag'55. (MLRA 8:10)
(Machine-shop practice)

BESSER, M.R.

AID P - 4856

Subject : USSR/Engineering
Card 1/1 Pub. 103 - 16/26
Authors : Besser, M. R. and S. A. Kaganov
Title : Automation of the counterboring of openings in separators of roller bearings.
Periodical : Stan. 1 instr., 2, 36-38, F 1956
Abstract : The reconstruction of the TO-100 turning lathe used for semi-automatic production of brass separators in roller bearings into a fully automatic machine for counterboring the openings in separators of roller-bearings is described and illustrated by the authors. Six drawings.
Institution : None
Submitted : No date

Subject : USSR/Engineering AID P - 4285
Card 1/1 Pub. 128 - 10/25
Author : Besser, M. R., Engineer
Title : Outfit for superfinishing
Periodical : Vest. mash., #2, p. 38-39, F 1956
Abstract : A superfinishing attachment (head) of special design
which can be mounted on any turning lathe is described.
Diagrams, photo.
Institution : None
Submitted : No date

BESSER, M.R. inzhener.

Gauges with indicators. Mashinostroitel' no.6:39-40 Je '57.

(MIRA 10:?)

(Gauges)

BESSER, M.R., inzh.

Attachment for machining by means of oscillating abrasive bricks.
Mashinostroitel' no.9:22 S '57. (MLBA 10:9)
(Grinding and polishing) (Lathes--Attachments)

BESSER, M.R., inzh.

Modernizing spindle heads of internal grinding machines. Vest. mash.
38 no.3:52-53 Mr '58. (MIRA 11:2)

(Grinding machines)

BESSER, M.R.

Measuring the wear of grinding wheels. Izv. tekhn. no. 1:17-18 Ja
'60. (MIRA 13:5)

(Grinding wheels--Testing)

BESSER, M.R.

Selecting drive power for a grinding wheel used for internal
cut-in grinding. Stan.1 instr. 31 no.2:19-21 F '60.

(MIRA 13:5)

(Grinding)

11900

S/122/60/000/011/016/020
A161/A127

AUTHORS: Besser, M. R., Kaganov, S. L., Engineers

TITLE:- Investigation of the polishing process when using a paste and copper brushes for polishing of internal cylindrical surfaces

PERIODICAL: Vestnik mashinostroyeniya, no. 11, 1960, 73,- 74

TEXT: In series and large-series production, internal grinding with longitudinal feed of hardened alloy steel parts provides usually a surface finish with a fineness of the 7 th grade according to the OCT2789-59 (GOST 2789-59) standard. Obtaining of the 8th grade involves a considerable increase of production costs. To extend the life of gliding surface, in particular those of roller bearing races, a surface finish with a fineness of the 9th grade should be achieved. Corresponding investigations and tests have been conducted at the 3ГПЗ (3GPZ) Plant where a new finishing method has been developed; polishing with the M-28 (M-28) paste and copper wire brushes made from copper wire, measuring 0.25 - 0.30 mm in diameter. Copper wire is cut into lengths, exceeding somewhat that of the required diameter of the brush, arranged in a proper layer around

Card 1/5

Investigation of the polishing ...

S/122/60/000/011/016/020
A161/A127

the circumference of a tube, which in turn is inserted into a cup to facilitate proper arrangement of the wire bundle. Then, the wires are tied together with a thin metal string and bent to form the U-shaped brush, which is fixed in a mandrel and tightened by a nut (Figures 1 and 2). The polishing process is carried out on an internal grinder (Figure 3) with the part chucked in a membrane chuck and the grinding disc replaced by the copper brushes prepared in the above mentioned manner. When adjusting the grinding machine, the brush is set at the workpiece with the cross feed being slightly tightened. The paste, diluted in spindle oil "2" is applied to the part on one spot with a hair brush. The part and the brush rotate in opposite directions with simultaneous reciprocating of the brush. Wear of the brush is compensated by additional periodical moving of the cross feed. The tests were carried out in the roller bearing department of the 3GPZ Plant. For the measurement of the fineness grade of the surface finish the QAMAH (Chaman) profilometer attached to the twin MHC-11 (MIS-11 Linnik) microscope and the MWM-1 (MII-1) interference microscope have been used. Outer ball bearing races, made from UX-15 (ShKh-15) steel and hardened to the HRC 60-64 hardness class were selected as specimens for the polishing tests. A total

Card 2/5

25098

Investigation of the polishing

S/122/60/000/011/016/020
A161/A127

of 60 tests were made. During testing all parameters remained unchanged except under investigation for which 3 values have been chosen. The following initial parameters have been selected: diameter of the part to be polished: $D_p = 173.5$ mm; diameter of the brush: $D_{br} = 165$ mm; fineness of the grinding finish of the parts used: 7; circumferential velocity of the brush: $v_{br} = 31$ m/sec; circumferential velocity of the part to be polished: $v_p = 103$ m/min; number of double motions of the brush: $a = 100$; polishing time: $T = 12$ sec. The following test results were achieved: 1) polishing with the paste and copper brushes resulted in an increase of the fineness by two grades and a stable obtaining of the 9th grade was ensured. 2) the internal surface of the hollow part was enlarged in the range of up to 0.02 mm. 3) taper and ovality of the hole was not changed by the polishing process. 4) changes of the number of the double motions of the brush (a) and of v_p of the part did not effect the surface finish. 5) increase of v_{br} within the ranges 21 - 41 m/sec improved somewhat the surface finish; it is, however, recommended not to increase the rpm of the brush beyond 4,000, since this could result in dangerous vibrations of the grinding spindle and damage of the same owing to the unbalanced state of the brush. 6) Extending the polishing period of time from 9 to 15 sec improves the surface finish within

Card 3/5

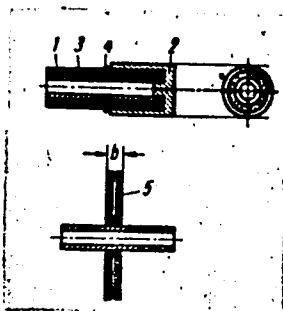
2:098

Investigation of the polishing

8/122/60/000/011/016/020
A161/A127

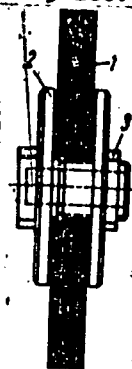
the range of 1 grade, an increase of the polishing time beyond 30 sec would result in excessive heating of the bearing race and should therefore be avoided. 7) it is possible to polish 2,500 parts with one brush until it is completely used up by wear. On the basis of these tests the following working parameters for the polishing of internal surface of hardened alloy steel parts are recommended: $v = 80$ m/min; $a = 60$ double motions/min; $v_{br} = 40$ m/sec (with not more than 4,000 rpm of the grinding spindle) and $T_{polishing} = 15$ sec. There are 6 figures.

Figure 1:



Card 4/5

Figure 2:



BESSER, M.R.; MANOKHIN, N.A.

Measuring the roughness of internal surfaces with the MIS-11 micro-
scope. Izv.tekh. no.10:14-15 0 '61. (MIRA 14:11)
(Microscope)

BESSEK M. R.

L 8916-65 E-T(d)/E-T(m)/EPR/T-2/EWP(k)/EWP(q)/EWP(b)/EWA(h)/EWP(r) Pf-L/PS-L
 ACCESSION NR: AP4046181 RAEM(a)/ASD(m)-3 JD/HW S/0122/64/000/009/0086/0087

AUTHOR: none

TITLE: Authors' abstracts of dissertations

SOURCE: Vestnik mashinostroyeniya, no. 9, 1961, 86-87

TOPIC TAGS: crane, bearing, surface hardening, polish, gear

ABSTRACT: V. V. Pyasetskiy: Investigation of unbraced crane booms; Leningradskiy politekhnicheskii institut imeni M. I. Kalinina (Leningrad Polytechnic Institute).

This is a study of a method for approximation computation of unbraced crane booms with transverse load. Results are given for investigation of fatigue at the site where boom and post join, and the effective concentration factors are provided. L.

V. Baskakov: Investigation of possible increase in life of bearings by mechanical surface hardening of the rings; Saratovskiy politekhnicheskii institut (Saratov Polytechnic Institute). This is a study of the surface layer of the ring for roller

bearings, hardened by the rotation of the rollers. The state of the surface layer prior to and after hardening is examined for different conditions of treatment. V.

I. Pilinskiy: Theoretical and experimental investigation of polishing hard alloys; Kuybyshevskiy politekhnicheskii institut imeni V. V. Kuybysheva (Kuibyshev Polytechnic Institute). The author investigates theoretically and experimentally the

Card 1/1

L 8916-65

ACCESSION NR: AP4046181

thermal phenomena arising during polishing of hard alloys. He establishes a connection between the temperature and the technological indices of the process, and he proposes methods and measures for most efficient polishing. N. P. Bernatskiy: Theory of gear engagement and a method for making worm gears with high load capacity; Leningradskiy politekhnicheskii institut imeni M. I. Kalinina (Leningrad Polytechnic Institute). This represents a search for new types of spur gears with high load capacity. The author examines a worm gear with a worm profile limited by a circular arc in axial and normal sections of the turn. He proposes and makes a thorough study of worm gears with convolute worms of a new type, having a concave profile in axial section. He discusses the method and results of experimental investigation on worm gears with worms polished by a toroidal device using the F. L. Litvin method. V. V. Shul'ts: The geometry and load capacity of spur gears; Leningradskiy politekhnicheskii institut imeni M. I. Kalinina (Leningrad Polytechnic Institute). This is a study on increasing the load capacity of worm gears by changing the geometry of the contact surfaces of the teeth. The parameters of the initial circular shape of the worm gears are determined for high load capacity. The author has designed a gear having twice the load capacity of correlative involute gears. V. A. Belov: A method of hardening the surface of a spherical head and the effect of this on the operational properties of the surface; Leningradskiy politekhnicheskii institut imeni M. I. Kalinina (Leningrad Polytechnic Institute). The author's study permits a scientific and practical evaluation of a series of

Card 2/4

L 8916-65

ACCESSION NR: AP4046181

important factors affecting the surface hardening of spherical heads. Experiments show that surface hardening increases many times the durability of cast iron and steel when subjected to friction with boundary lubrication during oxidizing abrasion. The labor expended and the cost of this treatment are 1.2 to 2.2 times less than those called for by standard milling and polishing to give identical quality. S. P. Maksimov: Natural oscillation of rotors caused by the oil layer of plain bearings; Leningradskiy politekhnicheskii institut imeni M. I. Kalinina (Leningrad Polytechnic Institute). This paper gives results of theoretical and experimental study of self-excited oscillations of a rotor in plain bearings. Rigid and elastic rotors were examined. Amplitude and stability of movements were measured. The author describes the behavior of the rotor during self-oscillation, and he considers the effect of different factors on this oscillation. M. R. Besger: Investigation on increasing productivity during internal in-feed grinding; Saratovskiy politekhnicheskii institut (Saratov Polytechnic Institute). This contains scientifically based recommendations for diminishing machine time during internal in-feed rough grinding. The author has investigated blunting and self-sharpening, and he has set up objective criteria for this. Results of this work have led to increased productivity of 15-20% in internal in-feed rough grinding.

ASSOCIATION: none

Card 3/4

BESSER, M.R., inzh.; BASKOV, L.V., inzh.

Depth and characteristics of changes in the structure of hardened
alloyed steel caused by grinding. Vest.mashinostr. 43 no.9:67-69
S '63. (MIRA 16:10)

KATSNEL'SON, I.B., dotsent; ~~BESSER, V.L.~~; IONOV, I.T.; GORYACHYIY, M.P.;
IOFIN, I.I.; CHARTORIZHSKIY, N.A., kand.med.nauk

Poisoning from castor bean seeds; clinical and experimental observations. Sov. med. 24 no. 2:131-135 F '60. (MIRA 14:2)
(CASTOR BEAN--TOXICOLOGY)

BESSER, Ya.R., kandidat tekhnicheskikh nauk; RABINOVICH, S.G., inzhener.

Complete mechanization of reinforced concrete work in industrial construction. Mekh. stroi. 11 no.1:7-13 Ja '54. (MLRA 6:12)
(Reinforced concrete construction)

BESSER, Ya. R.

BESSER, Ya.R., kandidat tekhnicheskikh nauk; SATS, M.N., inzhener.

"Concrete pumps." K.M.Barlaev, S.N.Alekseev. Reviewed by I.A.R.Besser,
M.N.Sats. Mekh.stroi. 11 no.6:31-32 Je '54. (MIRA 7:6)
(Concrete construction) (Pumping machinery)

BESSER, Ya.R., kandidat tekhnicheskikh nauk; GOGOLITSYN, V.A., inzhener;
SATS, M.N., inzhener.

Experience in using the S-290 concrete pump in hydraulic engineering
construction. Mekh.stroi.11 no. 9:14-21 S '54. (MLRA 7:9)
(Concrete) (Pumping machinery)

BESSER, Ya.R., inzhener; KAN, V.Ya., inzhener.

Evaluation of the various methods of concreting down-apron blocks.

Gidr.stroi. 23 no.8:4-9 '54.

(MLRA 8:1)

(Hydroelectric power stations) (Reinforced concrete construction)

BESSER, Ya.B., kandidat tekhnicheskikh nauk; MITGARTS, L.B., kandidat tekhnicheskikh nauk.

Efficiency of methods of delivering concrete mixes to construction sites. Stroi.prom. 32 no.4:38-40 Ap '54. (MLRA 7:5)
(Concrete--Transportation)

HESSER, Ya.R., kandidat tekhnicheskikh nauk.

Using a vibration trough in concreting massive structures. Stroi.
prom. 33 no.1:29-30 Ja'55. (MLRA 8:3)
(Concrete construction)

~~ESSER~~, Ya.P., kandidat tekhnicheskikh nauk, nauchnyy redaktor; MALYSHEV,
M.M., redaktor izdatel'stva; GUSEVA, S.S., tekhnicheskii redaktor

[Equipment used in the transportaton of concrete mixtures]
Prisposobleniia dlia transportirovaniia betonnoi smesi. Moskva,
Gos. izd-vo lit-ry po stroit. i arkhitekture, 1956. 21 p. (MLRA 9:7)

1. Moscow. Gosudarstvennyy institut po vnedreniyu peredovykh
metodov rabot i truda v stroitel'stve
(Concrete--Transportation)

^{R.}
BESSER, Ya. kandidat tekhnicheskikh nauk.

Vibrating equipment for transporting concrete mixtures. Stroi-
tel' 2 no.2:14 F '56. (MLRA 9:12)
(Vibrators) (Concrete--Transportation)

~~БЕССЕР, Яа., кандидат технических наук.~~

Industrial method for concreting solid structures. Stroitel' 2 no. 4-5:29
Ap-My '56. (MLRA 10:1)
(Concrete construction) (Foundations)

BESSER, Ya.R., kandidat tekhnicheskikh nauk.

Notes on the article "Experience with using concrete pumps in building the Gerkiy Hydroelectric Power Station." Gidr.stroi.25 no.8:54-55 S
'56. (MLRA 9:10)
(Concrete construction) (Gerkiy Hydroelectric Power Station)

BESSER, Ya.R., inzhener.; GAYDUK, A.K.

Making precast concrete foundation blocks in construction yards. Nov.
tekh. i pered. op. v stroi. 18 no.5:7-10 My '56. (MLRA 9:12)
(Foundations) (Precast concrete construction)

BESSER, Ya R., kandidat tekhnicheskikh nauk; KOROTKIY, M.F., inzhener;
SATS, M.N., inzhener.

Concrete work in building the sluices at the Kuybyshev Hydroelectric Power Station. Gidr.stroi. 25 no.9:8-15 0 '56. (MLRA 9:11)
(Kuybyshev Hydroelectric Power Station)
(Sluices)

BESSER, Ya. R.

GENDIN, Viktor Yakovlevich; BESSER, Ya. R., nauchnyy red.; GUZMAN, M.A., red.;
GARNUKHINA, L.A., tekhn. red.

[Manufacturing reinforced concrete elements by vibration stamping]
Izgotovlenie zhelezobetonnykh izdelii vibroshtampovaniem. Moskva,
Gos. izd-vo lit-ry po stroit. materialam, 1957. 23 p. (MIRA 1157)
(Precast concrete)

BESSER, V.A.R.

VOLCHANSKIY, Rostislav Andreyevich, kandidat tekhnicheskikh nauk; BESSER, Ya.R., nauchnyy redaktor; GURIN, A.V., redaktor; MATUSEVICH, M.L., tekhnicheskiiy redaktor

[Manufacturing precast reinforced concrete elements] Izgotovlenie sbornyykh zhelezobetonnykh konstruksii i detalei. Moskva, Vses. uchebno-pedagog. izd-vo Trudrezervizdat, 1957. 291 p. (MIRA 10:11)
(Precast concrete)

Ref: 100-111-1
SOKOLOV, I.G., kandidat tekhnicheskikh nauk; BESSER, Ya.R., kandidat tekhnicheskikh nauk,

"Volga-Don; technical report on the construction of the V.I. Lenin Volga-Don Canal, the TSimlyansk Hydroelectric Development and Irrigation Facilities; vol.4. Concrete work." Reviewed by I.G. Sokolov, IA.R. Besser, Mekh. stroi. 14 no.2:31-3 of cover P '57.
(MIRA 10:4)

(Volga-Don Canal)

(Concrete construction)

100-7-11/11
AUTHOR: Besser, Ya.R., Candidate of Technical Sciences
TITLE: ~~Supply of Concrete Mix for Small Structures in Construction Abroad~~
(Obespecheniye betonnoy smes'yu mekhanika stroyek v zarubezhnom stroitel'stve)
PERIODICAL: Mekhanizatsiya Stroitel'stva, 1957, Vol.14, No.7,
pp. 27 - 32 (USSR).
ABSTRACT: A review of concreting methods and concreting machinery
in the USA, Great Britain, Germany and Sweden.
There are 2 Russian, 2 English and 1 Swedish references.
There are 10 figures.
AVAILABLE: Library of Congress
Card 1/1
1. Concrete-Preparation 2. Concrete-Applications 3. Concrete-
Equipment 4. Construction-Equipment

14(2)

PHASE I BOOK EXPLOITATION

SOV/2424

Besser, Yakov Ruvimovich, and Valentin Petrovich Proskurnin

Montazh sbornyykh zhelezobetonnykh konstruktsiy (Erection of Precast Reinforced-concrete Structures) Moscow, Trudrezervizdat, 1958. 345 p. 30,000 copies printed.

Scientific Ed.: R.A. Volchanskiy; Ed.: M.A. Sokolova; Tech. Ed.: M.N. Person.

PURPOSE: This book is intended for workers in the construction industry.

COVERAGE: The author describes precast reinforced-concrete structures and discusses characteristics of individual elements, general requirements, material used, and erections. Information is also given on concrete work, fabrication of reinforced-concrete structural sections, work organization, and the working place. Particular emphasis is given to basic methods of erecting reinforced-concrete structures and the arrangement of equipment and tools used. No personalities are mentioned. There are 33 references, all Soviet.

TABLE OF CONTENTS:

Introduction
Card 1/5

Erection of Precast (Cont.)

SOV/2424

Ch. I. Materials Used in Fabricating Precast Concrete and Reinforced-Concrete Structures and Parts

- | | |
|---|----|
| 1. General concepts of concrete and reinforced concrete | 5 |
| 2. Binders and additives | 5 |
| 3. Aggregate | 7 |
| 4. Concrete and its properties | 16 |
| 5. Mixes | 21 |
| 6. Reinforcing steel | 30 |
| | 32 |

Ch. II. Basic Information on Structural Parts and Construction and Erection Work

- | | |
|---|----|
| 7. Types and parts of buildings | 37 |
| 8. Precast plain and reinforced-concrete structures and sections of buildings | 37 |
| 9. Types of construction and erection work and working order | 47 |
| | 76 |

Ch. III. General Information on Concrete Work

- | | |
|---|-----|
| 10. Mixing concrete | 81 |
| 11. Transporting and delivering concrete mix to the job | 81 |
| 12. Distributing and compacting concrete mix | 95 |
| 13. Curing, removal of sheeting, and repairing defects | 107 |
| | 113 |

Card 2/5

Erection of Precast (Cont.)

SOV/2424

14. Winter concrete work	115
15. Safety measures for mixing, transporting, and pouring concrete	124
Ch. IV. General Information on Fabrication of Reinforced-concrete Sections and Parts	
16. General information on plants and yards for fabrication of sections and parts	127
17. Making reinforcement	127
18. Forms for precast reinforced-concrete parts	133
19. Pouring and curing precast reinforced-concrete parts	139
20. Fabrication of prestressed reinforced-concrete parts	147
Ch. V. Erection Equipment and Cranes	159
21. Ropes, cables, and slings	169
22. Erection equipment	178
23. Erection cranes	187
Ch. VI. Transporting, Loading, and Unloading Work During Erection	
24. Transport of precast reinforced-concrete parts	214
Card 3/5	214